From: Rosen, Bailey [Rosen.Bailey@epa.gov]

Sent: 12/3/2020 2:55:43 PM

To: Collazo Reyes, Yvette [CollazoReyes.Yvette@epa.gov]; Giddings, Daniel [giddings.daniel@epa.gov]; Goodis, Michael

[Goodis.Michael@epa.gov]; Hartman, Mark [Hartman.Mark@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]; Hughes, Hayley [hughes.hayley@epa.gov]; Kochis, Daniel [Kochis.daniel@epa.gov]; Labbe, Ken [Labbe.Ken@epa.gov]; Layne,

Arnold [Layne.Arnold@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Nguyen, Khanh

[Nguyen.Khanh@epa.gov]; OPS CSID CB [OPS_CSID_CB@epa.gov]; Pierce, Alison [Pierce.Alison@epa.gov]; Sullivan,

Melissa [sullivan.melissa@epa.gov]; Vernon, Jennifer [Vernon.Jennifer@epa.gov]

Subject: FW: OCSPP News for December 2, 2020

OCSPP News Round-Up

TSCA

- The Intercept 12/2; TOXIC PFAS CHEMICALS DISCOVERED IN HUNDREDS OF PRODUCTS
- E&E News 12/1; N.Y. town sues 3 companies over PFAS contamination
- US News & World Report 12/2; Some Talc Products Contain Asbestos: Study
- Inside TSCA 12/1; Conservative Assumptions In New PV29 Draft Offer Caution To Industry
- Inside TSCA 12/1; Researchers Seek To Curb Fluoropolymers Despite Industry Safety Claims
- Inside TSCA 12/1; ADAO says new study of asbestos in talc shows need for ban
- Coastal Review Online 12/2; Science Advisory Board to Address PFAS
- EcoWatch 12/2; Toxic 'Forever Chemicals' Were Dropped Over Millions of Acres via Aerial Pesticide, Tests Reveal

Pesticides

- E&E News 12/1; EPA offers guidance on regulating crop 'biostimulants'
- US Right to Know 12/1; Bayer's bid to settle U.S. Roundup cancer claims making progress

Blog/OpEd/Other

- Bergeson & Campbell 12/1; EPA Releases Draft Scope Documents for Risk Evaluations of DIDP and DINP for Public Comment
- Nation of Change 12/2; New test finds aerially sprayed pesticide contains PFAS causing significant environmental issues
- JD Supra (Arent Fox) 12/1; EPA Proposes Expanded FIFRA Exemptions for Certain Plant-Incorporated Protectants (PIPs) Created Using Gene Editing
- Beyond Pesticides Daily News Blog 12/2; <u>PFAS 'Forever Chemicals' Found in Mosquito Pesticide, Raising</u>
 Concerns Over Widespread Contamination
- Sidley Energy Blog 12/1; Environmental Protection Agency Releases Draft Supplemental Risk Evaluation for 1,4-Dioxane, Chemical Byproduct in Consumer Goods
- Cozen O'Connor 12/1; Some Businesses Using PFAS Compounds Now Subject to TRI Reporting and Likely Greater
 Scrutiny

TOXIC PFAS CHEMICALS DISCOVERED IN HUNDREDS OF PRODUCTS

Sharon Lerner, The Intercept

https://theintercept.com/2020/12/02/pfas-chemicals-products/

SCIENTISTS HAVE DETAILED more than 200 uses of PFAS chemicals in 64 industrial areas, including mining, book conservation, plastics production, photography, printing, watchmaking, car manufacturing, air conditioning, fingerprinting, and particle physics. Many of the uses, which are laid out in an article published in the journal Environmental Science: Processes & Impacts, were previously unknown.

PFOA became famous for its use in Teflon, after the chemical leaked from a DuPont plant that made the coating for pots and pans into drinking water in West Virginia and Ohio. Then came the realization that PFOA, along with the closely related compound PFOS, was also in firefighting foam widely used by the military. Eventually it became clear that these compounds, along with others in the same class known as PFAS, were in microwave popcorn bags, pizza boxes, waterproof fabrics, carpeting, and dental floss. Still, the question of how these chemicals made their way from this handful of products into the bodies of most people on earth remained. The new paper sheds light on that mystery by dramatically expanding the understanding of the chemicals' industrial purposes — and by providing the structures, uses, and unique identifying numbers for more than 1,400 individual compounds used in everyday products.

This information, which is often fiercely guarded by the companies that make and use PFAS, can be difficult or impossible to obtain. Juliane Glüge, a senior researcher at the Swiss Federal Institute of Technology in Zurich and the study's principal author, spent almost a year digging up details about the uses of PFAS in patents, scientific papers, regulatory agencies, information from manufacturers, obscure databases, and even reporting by The Intercept. The result is an incredibly detailed picture of the extent to which PFAS chemicals, which have been shown to cause a range of health problems and persistent indefinitely in the environment, have become virtually omnipresent.

Broad Range of Products

Among Glüge's surprising discoveries was that PFAS compounds are used to coat the blades of windmills and the strings of guitars, lubricate pianos during tuning, stimulate oil wells, and coat the inside of oil pipelines. They are used in solar energy collectors and photovoltaic cells, brake fluid, pharmaceutical packaging, and windows in greenhouses; in some ammunition to decrease the likelihood of unintended explosions; in filters used by wineries to strain wine before it's bottled; and in glass to make it resistant to fingerprints, according to the new paper. Ironically — given that the chemicals are toxic and have come to contaminate water around the world — PFAS chemicals also play a role in water treatment and purification.

"It is the best inventory to date," David Andrews, senior scientist at the Environmental Working Group, said of the paper. Andrews himself has spent time going through trademark applications and cataloguing the PFAS chemicals he finds. "This expands on that work by a factor of 10."

In addition to PFAS's industrial uses, the paper also identified dozens of common consumer and athletic products that contain the chemicals, including lubricants for bicycles, coatings for tennis rackets, ski wax, fishing lines, some wooden boats, and sail covers. The compounds are also components of some rock-climbing ropes, a discovery that led one outdoor equipment company to recently launch a brand of PFAS-free ropes.

While it was previously known that personal care products contain PFAS, Glüge and her colleagues documented their presence in an incredibly wide range of cosmetics, including body lotion, body oil, foundation, concealer, blush, cuticle treatment, eye cream, eye pencil, eye shadow, brow products, hair creams, conditioners, anti-frizz cream, lip liner, makeup remover, anti-aging cream, mascara, moisturizer, bars of soap, shampoo, nail polish, nail strengthener, powder, hair spray and mousse, lip balm, lipstick, skin scrub, shaving cream, and sunscreen. The scientists also found one PFAS compound in hand sanitizer.

Bad Chemistry

Plastics and rubber production and the electronic industry accounted for the greatest amount of PFAS used in Sweden, Finland, Norway, and Denmark between 2000 and 2017, according to the paper. The author tried to obtain the amounts of various PFAS manufactured and imported in the U.S. but was told that the U.S. Environmental Protection Agency would not make that available because companies had claimed it as confidential business information, or CBI.

Kyla Bennett encountered a similar problem when she tried to get information on whether PFAS were used in pesticides. The question occurred to her because she lives in a town where the chemicals have been detected in drinking water. "I just couldn't understand why so many towns, including my own in southeastern Massachusetts, had contaminated water," said Bennett, who is science policy director for Public Employees for Environmental Responsibility. "We aren't near an airport, a military base, or a fire-training facility. Yet we had PFAS in our drinking water wells."

Bennett knew that her town was aerially sprayed with pesticides, but when she asked both the EPA and pesticide manufacturers about whether Anvil 10+10, the pesticide used in her town, contained PFAS, she couldn't get a straight answer and repeatedly ran into confidentiality claims. So she decided to get the pesticide tested through a commercial laboratory. The Massachusetts Department of Environmental Protection later did its own testing. The results, released yesterday, showed that the Anvil 10+10, which is aerially sprayed in 25 states, including New York, Florida, and Massachusetts, contained eight PFAS chemicals, among them PFOA and PFOS.

Bennett said she suspects that Anvil 10+10, the only product the group had chemically analyzed, might not be alone in containing PFAS. "Given the fact that it is the only one we tested and it had so many different PFAS in it, I fear it's just the tip of the iceberg," she said.

The Environmental Science paper identified seven compounds that were used as active ingredients in pesticides (including one used widely in Brazil) and five others that were added to the products as "inert ingredients."

Biden's Challenge

Glüge described the massive document as "a work in progress" and said she welcomed the input of other scientists who can add new compounds to it, clarify the exact purposes of chemicals already on the list, and report on whether some of the uses may have already been discontinued. She also said she was hopeful that it will spark discussion about how many of these compounds can be replaced with others that don't last indefinitely in the environment.

"The first step would be to look at the ones we think are nonessential," said Glüge. "For instance, there are already PFAS-free bicycle lubricants on the market. So why do we need one with PFAS in it?"

The European Union is asking similar questions. Noting that PFAS "contamination in some cases may be irreversible, making fundamental natural resources such as soil and water no longer usable," the European Commission has suggested both regulating the chemicals as a class and prohibiting all but essential uses of the chemicals.

In the U.S., limiting the use of these quickly proliferating chemicals may be trickier. After the Trump administration failed to carry out promised steps to limit and regulate PFAS, President-elect Biden has promised fast action. But he also placed Michael McCabe, who oversaw DuPont's successful effort to dodge regulation of PFOA and introduce a similarly toxic replacement PFAS compound, on his EPA transition team.

"Biden's got his work cut out for him," Bennett said. "They need to regulate PFAS as a class. They need to get the approval of these new PFAS under control. And they need to close the loophole of proprietary ingredients being withheld as CBI."

Because the EPA has allowed the chemicals into so many products and allowed companies to keep their presence confidential, "the burden of finding chemicals and proving them guilty often falls on small NGOs like PEER or citizens who are fighting for their lives," said Bennett. "And that's not right."

N.Y. town sues 3 companies over PFAS contamination

E.A. Crunden, E&E News

https://www.eenews.net/greenwire/2020/12/01/stories/1063719587?utm_campaign=edition&utm_medium=email&utm_source=eenews%3Agreenwire

A New York town yesterday sued three high-profile firms to recoup costs associated with water contamination by "forever chemicals."

The town of Hempstead, located on Long Island, filed suit in the U.S. District Court for the Eastern District of New York against 3M Co., E.I. du Pont de Nemours and DuPont spinoff Chemours Co.

According to the lawsuit, Hempstead operates 29 active public supply wells in five water districts, which are contaminated with per- and polyfluoroalkyl substances (PFAS). About 120,000 people rely on those wells for their drinking water.

"The Town of Hempstead is already implementing water treatment technologies that will meet or exceed the new standards set by the State. But their residents should not have to pay the enormous costs to do that," Sher Edling LLP senior associate Stephanie Biehl, who is representing Hempstead, said in a statement. "Neither the Town nor its residents caused the problem."

Hempstead argued that the companies should pay compensatory damages as the town seeks reimbursement for the cost of treatment and mitigation. The town said "the parties responsible" for the contamination should bear the costs of addressing it.

"There are several current and former industrial sites near the Town's wells or located in the vicinity of sources of the Town's water supply that are likely to have contributed to the release of PFOA and PFOS," the town argued, referencing the two most notorious PFAS.

A family of thousands of chemicals, PFAS have been linked to severe health issues including cancer and liver damage. PFAS are found in a wide array of items including nonstick pans and firefighting foam, and the chemicals are persistent in the waste stream.

Industrial sites of particular concern for Hempstead include several current and former landfills near the town's water supply, along with municipal and industrial wastewater treatment plants. Hempstead is seeking to subject its water supply to increasingly common PFAS treatments like granular activated carbon, reverse osmosis and ion exchange — all of which waste industry experts have deemed costly, especially for budget-strapped municipalities.

DuPont, Chemours and 3M are among the most high-profile PFAS manufacturers and have faced significant litigation over contamination. Hempstead contended that the manufacturers should be accountable for "defective design" and a failure to warn the public about the dangers of PFAS.

The town also raised claims of negligence, public nuisance and trespass against all three companies. Against DuPont specifically, Hempstead alleged fraudulent conveyance and cited DuPont-Chemours transactions. DuPont spun off Chemours in 2015, and the latter sued its former parent company last year, alleging it was saddled with millions of dollars in PFAS cleanup costs.

New York is one of a growing number of states cracking down on PFAS contamination in water. In August, the state set maximum contaminant levels for PFOA and PFOS in drinking water at 10 parts per trillion, some of the lowest limits nationwide.

Municipalities and individuals have increasingly sought damages from PFAS manufacturers as they grapple with contamination. In May, more than 200 property owners in Fayetteville, N.C., sued DuPont and Chemours over contaminated water (Greenwire, May 22).

A spokesperson for 3M said the company is ready for the legal battle.

"3M acted responsibly in connection with products containing PFAS and will vigorously defend our record of environmental stewardship," the company said in a statement.

Neither Dupont nor Chemours responded to a request for comment by publishing time.

Some Talc Products Contain Asbestos: Study

Cara Murez, US News & World Report

https://www.usnews.com/news/health-news/articles/2020-11-30/some-talc-products-contain-asbestos-study

MONDAY, Nov. 30, 2020 (HealthDay News) – Nearly 15% of talc-based cosmetic products analyzed in a recent study contained asbestos.

Environmental Working Group (EWG) -- an American advocacy nonprofit that commissioned the tests and did the analysis -- said methods used by the cosmetics industry to screen talc supplies are inadequate. The voluntary testing method developed by industry is not sensitive enough to screen for asbestos when compared to electron microscopy, the group said.

"Many well-known brands use talc in body and facial powders that can be inhaled," said Nneka Leiba, an EWG vice president.

She noted that EWG's online database has identified more than 2,000 personal care products that contain talc, including more than 1,000 loose or pressed powders that could pose an inhalation risk.

"It's troubling to think how many Americans have been using talc-based cosmetics products potentially contaminated with asbestos," Leiba said in an EWG news release.

The analysis was published Nov. 25 in the journal Environmental Health Insights.

The Scientific Analytical Institute conducted the tests, using electron microscopy to analyze samples. The U.S. Food and Drug Administration does not require testing talc supplies.

"It is critical that the FDA develop a rigorous screening method for talc used in personal care products," said Sean Fitzgerald, head of the Greensboro, N.C.-based institute. "The lab repeatedly finds asbestos in products made with talc, including cosmetics marketed to children. It's outrageous that a precise method for testing personal care products for the presence of asbestos exists, but the cosmetics industry isn't required to use it."

Fitzgerald's lab tested 21 samples of powder cosmetics, including eye shadow, foundation, blush, face and body powders.

Talc is often used in cosmetics as a filler or to improve texture or absorb moisture. Talc and asbestos can be formed in the same rocks that are mined for both cosmetics use and industrial use. The federal government does not require that cosmetics be tested for asbestos, instead encouraging companies to select talc mines carefully to avoid asbestos contamination, according to the study.

In May, Johnson & Johnson announced it would end the sale of its talc-based baby powder in the United States and Canada. Thousands of people have filed lawsuits against the company, claiming the product caused cancer, the study said.

"Inhaling even the tiniest amount of asbestos in talc can cause mesothelioma and other deadly diseases, many years after exposure," Tasha Stoiber, a senior scientist at EWG, said in the release. "How much talc is inhaled -- and how much is contaminated with asbestos -- is hard to know, but it only takes one asbestos fiber, lodged in the lungs, to cause mesothelioma decades later."

EWG reports that exposure to asbestos is linked to asbestosis, mesothelioma, and lung and ovarian cancer.

Based on federal data, the EWG Action Fund estimates that up to 15,000 Americans die each year from asbestostriggered disease.

In March 2019, Congresswoman Debbie Dingell (D-Mich.), introduced legislation that would require warning labels on cosmetics that could contain asbestos and are marketed to children.

EWG called for Congress to pass legislation mandating rigorous testing of talc-based personal care products.

More information

The U.S. Environmental Protection Agency has more information on asbestos.

Conservative Assumptions In New PV29 Draft Offer Caution To Industry

Maria Hegstad, Inside TSCA

https://insideepa.com/tsca-news/conservative-assumptions-new-pv29-draft-offer-caution-industry

Industry attorneys are warning that conservative new assumptions EPA has made in its recently released second draft TSCA evaluation of the human health risks of exposure to pigment violet 29 (PV29) could become standard practice for the program as PV29 represents one of the precedential first 10 evaluations since Congress reformed the law.

"The conservative assumptions in the PV29 risk evaluation are not unique -- we are seeing them (and will continue to see them unless fundamental changes are made) across the board. If their use persists, they will become the standard," writes Martha Marrapese, a partner with the law firm Wiley Rein, in a Nov. 18 blog post.

"Historically, TSCA is systematic in the following sense -- by doing chemical evaluations in the same procedural way with a consistent methodology, like parties are treated similarly and the appearance of unfair (or favorable) treatment of some over others is avoided. It's the classic box of 'This is the way.' This TSCA mindset is unlikely to change, nor should it, providing that the tools in the tool box are current and honed."

Marrapese is the second industry source to have raised concerns about EPA's revised draft assessment of PV29. In a recent letter to EPA seeking to extend its public comment deadline, the Color Pigments Manufacturers Association, Inc. charged that its "initial review of the Revised Risk Evaluation indicates that a very significant error has been made in its preparation by applying incorrect physico-chemical properties for [PV29]. . . . If finalized as written, the Revised Risk Evaluation would have a very significant, unnecessary, negative impact on the color pigment business and numerous customer businesses in the United States which manufacture and use ink, paint and plastic products."

EPA's revised draft risk evaluation, released Oct. 29, proposes to find that eleven of 14 uses of PV29 -- which is used in acrylic and automotive paints, printing inks and packaging -- pose unreasonable risks to humans and are eligible for regulation under section 6 of the Toxic Substances Control Act (TSCA).

The draft found unreasonable risks in a series of uses, including domestic manufacturing and importing, processing -- which covers incorporation into mixtures used in paint and coatings and plastic and rubber products, as well as PV29's use as an intermediate in the creation or adjustment of color of other perylene pigments -- and recycling.

The proposal significantly strengthens EPA's original draft, which found that PV29 "does not present an unreasonable risk of injury to human health or the environment." The agency issued the revised draft after taking the novel step of ordering manufacturers to conduct certain tests on the substance and provide the data to the agency based on recommendations from its science advisors.

"The test order information combined with additional particle size information received from the manufacturers had a significant impact on EPA's analysis of the potential exposure and health effects of PV29. As a result of this updated analysis, the revised draft risk evaluation now shows unreasonable risk for [11] out of 14 conditions of use," the agency says in an Oct. 30 Federal Register notice.

'Trifecta Of Conservative Assumptions'

Marrapese says that the changes result from a series of conservative assumptions that EPA makes using the new information it requested and received on particle size and occupational air monitoring, including the surrogate particle

EPA uses because it lacks toxicity data, exposure that results from new particle size data and use of less protective APF 10 respirators.

"Based on particle size data that were submitted in response to the agency's data call in, EPA is now estimating exposure to this pigment based on a particle size of 0.043 [nanometers (um)], using carbon black (and its known lung overload effects) as a surrogate, and assuming the use of APF 10 respirators in the workplace," Marrapese writes.

"This is a trifecta of conservative assumptions that are obviously the basis for why the agency has changed its mind on PV29: once thought to pose no unreasonable risks, the updated risk evaluation proposes to classify PV29 as presenting an unreasonable risk in the workplace from its manufacture and import all the way downstream to virtually every use. . ."

One of the changes EPA makes in its evaluation is changing its surrogate, necessary because EPA lacks toxicity data via inhalation and did not ask the companies to conduct new inhalation toxicology testing. In such cases, EPA uses a surrogate to model the exposure because it lacks chemical-specific dosimetry information that would be obtained from a toxicology study. In this case, EPA is proposing that a more toxic surrogate, carbon black, is a closer match to PV29 than its original surrogate particle of barium sulfate.

The selection of the new surrogate is among the changes that EPA asks a new panel of peer reviewers who are currently conducting a letter peer review of the second draft evaluation to consider -- a decision blasted by environmentalists who consider the peer review too limited to properly address the significance of the changes EPA has proposed.

Marrapese notes that "EPA is closely evaluating factors like the physical form of the chemical during use and the engineering controls that are part of the process to prevent exposure. So, for example, the PV29 draft risk evaluation is proposing to employ the absolute smallest measured particle in the data submitted to the agency but it does not transparently communicate what the actual percentage of respirable size particles are of that specific size."

"This demonstrates the importance of considering how to present particle size data to EPA. Given that PV29 is only produced at about 500,000 -- 600,000 pounds per year, as consistently shown by [Chemical Data Reporting rule (CDR)] data, it is not clear how lung overload quantities could be achieved in that particle size range and thus why an unreasonable risk finding actually -- as opposed to conceptually -- exists."

More generally, Marrapese notes that "TSCA always has been heavy on the science, and this will only become more pronounced as these risk evaluations continue to emerge. It's why technical experts in risk assessment are so important to have on hand if your chemical or use is subject to a section 6 risk evaluation. Industrial hygiene expertise, in particular, is necessary in and outside of the agency, to more fundamentally understand the science behind workplace exposures. It is also why a risk management procedural framework rule is needed so we have fair and objective guardrails for protecting public health and the environment at a critical point in the section 6 process -- the end."

Management Rules

Industry groups petitioned EPA under TSCA section 21 last June to write such a framework procedural rule that would guide upcoming risk management regulations the agency is required to write to address any unreasonable risks it finds in its chemical evaluations. The petition was filed as EPA was starting the process to write its first risk management rules -- governing dozens of uses of methylene chloride, 1-bromopropane and several flame retardants.

Backers of the petition say the rule is needed to codify the "tailored" approach the law requires when the agency crafts its regulations. The legal standard for risk management now "seems to require the agency to calculate the reduction in risk that is achieved after various mitigation options are employed and tailor risk management so that it is not unnecessarily overbroad," the petition says.

But EPA quietly rejected the petition last July, deeming it "not a valid petition under TSCA section 21," in its official response from toxics chief Alex Dunn. The agency, however, says it will review the petition under the Administrative

Procedure Act (APA), whose authorities allow agencies much longer than the 90 days than TSCA gives EPA to weigh private parties' petitions -- an approach that appears to provide the legal basis for the agency's continuing review of the petition.

"TSCA is forcing EPA to become competently expert on these chemicals. Under Chevron, EPA's determinations and assumptions in science-based areas will be given deference. Where stakeholders disagree, their concerns need to be bolstered by sound science and by marshalling well-supported, factual arguments that a condition of use is not likely. Building a factual record of support during the risk evaluation process is essential for challenging unreasonable risk determinations down the road," Marrapese concludes.

She adds that four years after TSCA reform, "we are still in the early stages in the development of this program. Information and the right expertise remains a real need on the exposure side of the equation in these risk assessments." -- Maria Hegstad (mhegstad@iwpnews.com)

Researchers Seek To Curb Fluoropolymers Despite Industry Safety Claims

Diana DiGangi, Inside TSCA

https://insideepa.com/tsca-news/researchers-seek-curb-fluoropolymers-despite-industry-safety-claims

Researchers are stepping up calls to curb the production and use of fluoropolymers -- fluorocarbon-based polymers made using various per- and polyfluoroalkyl substances (PFAS) -- because of concerns that they are not safe, pushing back on industry claims that the substances are stable, not harmful and widely used in critical medical and other goods.

The researchers, together with environmentalists, say industry should move toward only using fluoropolymers in highly controlled environments and in limited essential-use categories because they are not as stable or easy to safely dispose of as industry claims, and will degrade in a way that leaches PFAS into the environment.

"Our recommendation is to move toward the use of fluoropolymers in closed-loop mass flows in the technosphere and in limited essential-use categories, unless manufacturers and users can eliminate PFAS emissions from all parts of the life cycle of fluoropolymers," said Rainer Lohmann, director of the University of Rhode Island's Sources, Transport, Exposure and Effects of PFAS (STEEP) program, in comments to Inside TSCA.

Lohmann tells Inside TSCA that scientists have found "plenty of evidence and concerns" regarding the production, use and disposal of fluoropolymers that give them reason to oppose industry's push to exempt the substances "from regulatory scrutiny."

He cites fluoropolymers' "extreme persistence in the environment, the associated emissions of PFAS during production, manufacturing and use, and no good disposal/recycling options" as reasons for this opposition.

Lohmann will present findings on this subject from an Oct. 12 paper that he authored along with other researchers during a Dec. 3 webinar hosted by the Collaborative on Health and the Environment (CHE).

CHE cites such concerns as reason for strict regulation of fluoropolymers, saying, "Given fluoropolymers' extreme persistence; emissions associated with their production, use, and disposal; and a high likelihood for human exposure to PFAS, their production and uses should be curtailed except in cases of essential uses."

The authors of the Oct. 12 paper agree, recommending industry move toward only using fluoropolymers in highly controlled environments and in limited essential-use categories, "unless manufacturers and users can eliminate PFAS emissions from all parts of the life cycle of fluoropolymers."

But Lohmann's concerns and recommendations are at odds with industry claims that fluoropolymers are safe and essential in many uses.

For example, the American Chemistry Council (ACC) is pushing back on plans by a group of states to bar all PFAS and other substances from packing materials. In recent comments to the Toxics in Packaging Clearinghouse (TPCH), ACC argued in part that the group should not ban all PFAS from packaging as they have proposed because they have different structures, properties and toxicities.

"The different members of this universe are not the same and should not be regulated as a single group," ACC said, citing the case of fluoropolymers, which are used in pharmaceutical packaging and have a less toxic hazard profile than other PFAS. "Given their benign hazard profile and their low exposure potential, it would be arbitrary and inappropriate to restrict the use of fluoropolymers in packaging," ACC says.

As such, strictly regulating fluoropolymers and other PFAS in the same way could cause "significant market disruption including in critical applications such as pharmaceuticals," the group wrote. "Yet this is the perverse consequence that would flow from the one-size-fits-all approach of regulating all PFAS as a single group."

'Polymers Of Low Concern'

In a similar vein, the American Chamber of Commerce to the EU, has pushed back on European policymakers plans to group all PFAS in a single class for assessment and regulatory purposes, charging it will unfairly target various fluoropolymers.

"The high molecular weight backbone polymers, such as PTFE, FEP, ETFE and PFA, have been widely cited as being of low concern. To restrict them is to unnecessarily disrupt entire industries without any identifiable hazard," the group said in recent comments to EU officials.

Such safety claims rely in part on a 2018 study, published by Barbara Henry, a toxicologist for the manufacturer W. L. Gore and Associates, a company that produces Gore-Tex and other fluoropolymer-based products, along with other coauthors, that found few if any risks from fluoropolymers, sought to characterize them as "polymers of low concern" and recommended grouping them as a separate category of substances from other PFAS compounds.

"Fluoropolymers have thermal, chemical, photochemical, hydrolytic, oxidative, and biological stability," the paper said. "They have negligible residual monomer and oligomer content and low to no leachables. Fluoropolymers are practically insoluble in water and not subject to long-range transport," it added.

"Fluoropolymers satisfy widely accepted assessment criteria to be considered as "polymers of low concern" (PLC). This review concludes that fluoropolymers are distinctly different from other polymeric and nonpolymeric PFAS and should be separated from them for hazard assessment or regulatory purposes. Grouping fluoropolymers with all classes of PFAS for "read across" or structure--activity relationship assessment is not scientifically appropriate.

But Lohmann says his Oct. 12 study, "Are Fluoropolymers Really of Low Concern for Human and Environmental Health and Separate from Other PFAS?," published in Environmental Science and Technology, found there is no scientific rationale for concluding fluoropolymers are of low concern for environmental and human health.

"Their extreme persistence and the emissions associated with their production, use, and disposal result in a high likelihood for human exposure as long as uses are not restricted. Concluding that some specific fluoropolymer substances are of low concern for environmental and human health can only be achieved by narrowly focusing on their use phase," the researchers state in their conclusion.

He tells Inside TSCA that the webinar will review the evidence the authors could gather on whether there is sufficient reason to exempt fluoropolymers from regulatory scrutiny, as was recently proposed by some industry-scientists. On the contrary, we find plenty of evidence and concerns regarding the production, use and disposal of fluoropolymers, given their extreme persistence in the environment, the associated emissions of PFAS during production, manufacturing and use, and no good disposal/recycling options." -- Diana DiGangi (digangi@iwpnews.com)

ADAO says new study of asbestos in talc shows need for ban

Inside TSCA

https://insideepa.com/tsca-takes/adao-says-new-study-asbestos-talc-shows-need-ban

A new study from environmentalists finding asbestos contamination in talc products reiterates the need for a ban on the toxic mineral, says the Asbestos Disease Awareness Organization (ADAO), which backed a comprehensive, bipartisan asbestos ban in Congress that failed to pass over a disagreement about including talc asbestos in the bill.

ADAO says that the study "confirms that asbestos remains a deadly threat in cosmetics. Without a ban, asbestos will continue to plague Americans in homes, schools, workplaces, and on consumer shelves," in a Dec. 1 statement.

The study, commissioned by the Environmental Working Group (EWG) and published Nov. 24 in the journal Environmental Health Insights, used transmission electron microscopy analysis to evaluate the presence of asbestos in a score of talc samples.

The analysis "revealed that 3 of 21 powder-based cosmetic products tested were contaminated with amphibole asbestos," the study's abstract states. "One of these contaminated products is expressly marketed for use by children. The presence of asbestos found in products demonstrates the urgency to revise cosmetics policy. Further, talc-based cosmetics may be an overlooked and difficult to characterize source of exposure to asbestos, a known carcinogen."

The issue of asbestos-contaminated talc was central to the failure of H.R. 1603, a bipartisan bill instructing EPA to ban asbestos uses within one year of enactment. The bill won support for providing a longer phase-out period than EPA could under TSCA to the chlor-alkali industry, the largest remaining importer of asbestos into the U.S., but failed for months to address concerns from trial lawyers that not expanding the definition of asbestos in the bill to include the types of asbestos in talc would undercut pending tort litigation against manufacturers of talcum powder that contains asbestos.

When Democrats added the desired language into the bill last October, it fell afoul of concerns from the National Sand & Gravel Association and other industry groups that it expanded the definition of asbestos too broadly and inadvertently negated a de minimis concentration exemption that the industry group won early in bill negotiations. Last-minute opposition from the group led to the loss of Republican support, and the bill's failure to pass the House last October.

Science Advisory Board to Address PFAS

Coastal Review

https://www.coastalreview.org/2020/12/science-advisory-board-to-address-pfas/

A state advisory board is set to discuss during an online meeting next week issues and regulations relevant to per- and polyfluoroalkyl substances, or PFAS, mixtures.

Set for 9:30 a.m. Monday, the state Secretaries' Science Advisory Board members will also continue a discussion on hexavalent chromium. Humans can be exposed to hexavalent chromium, generally produced by industrial processes, by breathing it in, ingesting it in food or water, or direct contact with the skin. The compound, a carcinogen, has been linked to lung cancer in humans when inhaled, according to the National Institute of Environmental Health Sciences.

Join the online meeting or listen by phone at 1-415-655-0003 US TOLL, Access Code: 178 308 4586. Mute your telephone upon entering. Register to speak by 5 p.m. Thursday.

On the meeting agenda to speak about PFAS occurrence data in are researcher Detlef Knappe with North Carolina State University, and a representative from the state Department of Environmental Quality's Divisions of Water Resources, Waste Management, and Air Quality.

Michigan PFAS Action Response Team, Jennifer Gray, Dr. Eric Wildfang, Kory Groetsch and Steve Sliver, are also expected to speak on Michigan's chemical-by-chemical health goals for several more individual PFAS chemicals.

For those attending online, DEQ recommends testing your computer's WebEx capabilities prior to the public hearing. Test your computer.

The Secretaries' Science Advisory Board includes 16 experts in toxicology, public health, ecology, engineering and other related fields. Their expertise assists the state departments of Environmental Quality and Health and Human Services by recommending reviews and evaluations of contaminants, acting as consultants on DEQ's determinations to regulate contaminants, and helping the agencies identify contaminants of concern and determine which contaminants should be studied further.

<u>Toxic 'Forever Chemicals' Were Dropped Over Millions of Acres via Aerial Pesticide, Tests Reveal</u> Jessica Corbett, EcoWatch

https://www.ecowatch.com/pfas-aerial-pesticides-2649108690.html?rebelltitem=2#rebelltitem2

A national nonprofit revealed Tuesday that testing commissioned by the group as well as separate analysis conducted by Massachusetts officials show samples of an aerially sprayed pesticide used by the commonwealth and at least 25 other states to control mosquito-borne illnesses contain toxic substances that critics call "forever chemicals."

Officially known as per- and polyfluoroalkyl substances (PFAS), this group of man-made chemicals — including PFOA, PFOS, and GenX — earned the nickname because they do not break down in the environment and build up in the body. PFAS has been linked to suppressed immune function, cancers, and other health issues.

Lawmakers and regulators at various levels of government have worked to clean up drinking water contaminated by PFAS. The newly released results of pesticide testing by Public Employees for Environmental Responsibility (PEER) and the Massachusetts Department of Environmental Protection (MADEP) generated alarm about the effectiveness of such efforts.

"In Massachusetts, communities are struggling to remove PFAS from their drinking water supplies, while at the same time, we may be showering them with PFAS from the skies and roads," PEER science policy director Kyla Bennett, a scientist and attorney formerly with U.S. Environmental Protection Agency (EPA), said in a statement Tuesday.

"The frightening thing is that we do not know how many insecticides, herbicides, or even disinfectants contain PFAS," added Bennett, who arranged for the testing. "PEER found patents showing chemical companies using PFAS in these products, and recent articles discuss the variety of pesticides that contain PFAS as either an active or an inert ingredient."

The product tested initially by PEER and subsequently MADEP, once the nonprofit alerted the department of its findings, is Anvil 10+10, produced by the Illinois company Clarke.

Karen Larson, Clarke's vice president of government affairs, told the Boston Globe that "when this was first brought to our attention, we conducted an internal inquiry of our manufacturing and supply chain to ensure that PFAS was not an ingredient in the production, manufacturing, or distribution of either the active or inactive ingredients of Anvil."

"No PFAS ingredients are used in the formulation of Anvil, nor in the production of any source material in Anvil. PFAS components are not added at any point in the production of Anvil," she said. Larson added that while it is unclear why the Clarke pesticide contained PFAS, the company "will continue to work closely with the EPA to conduct our own testing."

PEER executive director Tim Whitehouse detailed the recent testing results in a letter sent last week to MADEP Commissioner Martin Suuberg that called for halting the use of Anvil 10+10, ensuring any replacement does not contain forever chemicals, and requiring pesticide companies to comprehensively test their products for PFAS:

This fall, PEER conducted several tests for PFAS of a 2.5 gallon jug of Anvil 10+10, the pesticide used in the aerial spraying programs of Massachusetts and many other states. Our tests revealed that Anvil 10+10 contains roughly 250 parts per trillion (ppt) of perfluorooctanoic acid (PFOA), and 260–500 ppt of hexafluoropropylene oxide dimer acid (HFPO-DA), a GenX replacement for PFOA. Both these results are hovering around the detection limits of the laboratory's equipment, but there is no doubt that these PFAS are in the insecticide. While PFAS may be useful when added to pesticides as surfactants, dispersants, and anti-foaming agents, it is unclear whether the PFAS found in Anvil 10+10 is an ingredient added by the manufacturer, contained in one of the ingredients supplied to Anvil's manufacturer by other companies, or whether it is a contaminant from the manufacturing/storage process. Moreover, since we were only able to test for 36 PFAS out of the 9,252 on the U.S. Environmental Protection Agency's (EPA's) inventory, it is impossible to know how many other PFAS might be in Anvil 10+10.
[...]

When PEER obtained its first positive PFAS results on Anvil 10+10, we immediately contacted DEP because of the farreaching implications. MADEP independently tested nine samples of Anvil 10+10 from five different containers, and found eight different PFAS, including PFOA and PFOS. Some PFAS levels were over 700 ppt. As such, there appears to be no doubt that there are PFAS in the pesticide Massachusetts has chosen for mosquito control. Whitehouse noted that Massachusetts aerially sprayed 2.2 million acres with Anvil 10+10 last year and more than 200,000 acres this year. The Boston Globe explained that "most of the spraying has been done in the southeastern part of the state, where EEE, a rare but deadly mosquito-borne disease, has been most prevalent."

The EPA, which has been lambasted by lawmakers as well as environmental and public health advocates for its handling of PFAS contamination on a national scale, is working on "an analytical method" to detect the forever chemicals in pesticides and plans to conduct its own tests of Anvil 10+10, according to the newspaper.

"There are significant unanswered questions about the data currently available," Dave Deegan, a spokesperson for the federal agency's offices in New England, told the Boston Globe. "EPA will continue to work closely with and support the state on this issue. Aggressively addressing PFAS continues to be an important, active, and ongoing priority for EPA."

Bennett and other critics of the EPA's response to PFAS reiterated concerns about the agency in the wake of the revelations in Massachusetts.

"This PFAS fiasco shows that public trust in EPA having a full accounting of these materials and their safety is utterly misplaced," said Bennett. "Until EPA acts, states need to adopt their own safeguards and chemical disclosure requirements because they certainly cannot depend upon the diligence of EPA."

In a statement about the testing on Tuesday, Food & Water Watch executive director Wenonah Hauter declared that "these findings shock the conscience — states likely have unknowingly contaminated communities' water with PFAS hidden in pesticides. Once again, the EPA has failed to protect the American people from harmful pollution."

Emphasizing that "we need to stop the introduction of toxic forever chemicals into the environment and our water sources to protect public health," Hauter said that "the EPA must ban all pesticides with PFAS components, designate PFAS as hazardous substances to hold polluters accountable for cleanup of contamination, and set strong enforceable standards for PFAS in our drinking water."

"The GOP-controlled Senate must step up and pass the PFAS Action Act, which passed the House in January, to regulated these toxic compounds and hold polluters accountable, and Congress must pass he WATER Act to provide the financial relief to community water providers and households with wells to remove PFAS from drinking water or find alternative sources where treatment fails," she added. "Now is the time for decisive action to protect people's health and safety."

EPA offers guidance on regulating crop 'biostimulants'

Marc Heller, E&E News

https://www.eenews.net/greenwire/2020/12/01/stories/1063719591?utm_campaign=edition&utm_medium=email&utm_source=eenews%3Agreenwire

Farmers may turn someday to seaweed, bacteria and fungi to make crops grow faster or stand up to insect pests — once federal agencies figure out how to regulate them.

In the latest move, EPA released updated draft guidance this week for plant "biostimulants" in hopes of reaching a clear consensus next year on which ones should be regulated as pesticides.

That decision is a serious matter for agribusinesses and for crop production. The new products, derived from natural materials, can act like fertilizer or pesticides or help plants retain water so they don't have to be irrigated as often, among other benefits.

Depending on the claims made by manufacturers, some biostimulants may have be to registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), making for a longer path to everyday use.

"EPA is taking this step since there has been some confusion among industry and States as to how the emerging product area, called plant biostimulants, does or does not trigger FIFRA's plant regulator requirements," EPA said in the draft guidance published yesterday. The document is open to public comment for 30 days.

In the draft, EPA offered examples of manufacturers' claims that might trigger pesticide registration requirements, such as promoting or slowing seed germination. On the other hand, claims that a product improves soil conditions wouldn't require regulation under FIFRA.

Biostimulants can come from a wide variety of sources. Seaweed extracts are one source. So is liquefied manure when mixed with certain chemicals and humic acid — a leftover from the decay of plants and animals that can boost plant growth.

But the federal government doesn't have a legal definition of biostimulants, even though Congress addressed the issue in the 2018 farm bill, requiring a report from the Department of Agriculture. USDA has suggested some wording to lawmakers.

Rep. Chellie Pingree (D-Maine), an organic farmer and senior member of the House Agriculture Committee, earlier this year urged EPA not to rush the process in order to give Congress more time to work on a definition.

Industry groups say FIFRA, in place for decades, isn't well-suited for the new technology. The law doesn't require registration of soil amendments, for instance, but its definitions may be outdated, according to the Biological Products Industry Alliance.

"Since these definitions were established over 60 years ago, many new products and technologies have been developed that don't fit squarely into one of these excluded categories," the group said.

The biostimulant industry — including small companies and trade groups such as the BPIA and CropLife America — has been urging an approach that addresses the confusion and eases the way to market for the products. Most of that effort has come from the BPIA and another group called the U.S. Biostimulant Coalition, which say most biostimulants won't trigger FIFRA (Greenwire, May 4, 2018).

The groups are pushing for criteria and standards to be developed by the first quarter of next year, with companies conducting case studies in the first half of the year. EPA said it expects to issue final guidance in January.

Bayer's bid to settle U.S. Roundup cancer claims making progress

Carey Gillam, US Right to Know

https://usrtk.org/monsanto-roundup-trial-tracker/bayers-bid-to-settle-u-s-roundup-cancer-claims-making-progress/

Monsanto owner Bayer AG is making progress toward a sweeping settlement of thousands of U.S. lawsuits brought by people alleging they or their loved ones developed cancer after exposure to Monsanto's Roundup herbicides.

Recent correspondence from plaintiffs' lawyers to their clients underscored that progress, confirming a large percentage of plaintiffs are opting to participate in the settlement, despite complaints by many plaintiffs that they are facing unfairly small payout proposals.

By some calculations, the average gross settlement will leave little to no compensation, perhaps a few thousand dollars, for individual plaintiffs after attorneys' fees are paid and certain insured medical costs are reimbursed.

Nevertheless, according to a letter sent to plaintiffs in late November by one of the lead law firms in the litigation, more than 95 percent of the "eligible claimants" decided to participate in the settlement plan negotiated by the firm with Bayer. A "settlement administrator" now has 30 days to review the cases and confirm the plaintiffs' eligibility to receive settlement funds, according to the correspondence.

People can choose to opt out of the settlement and take their claims to mediation, followed by binding arbitration if they wish or try to find a new lawyer who would take their case to trial. Those plaintiffs could have a difficult time finding a lawyer to help them take their case to trial because the law firms agreeing to the settlements with Bayer have agreed not to try any more cases or assist in future trials.

One plaintiff, who asked not to be identified by name due to the confidentiality of the settlement proceedings, said he is opting out of the settlement in hopes of obtaining more money through mediation or a future trial. He said he requires ongoing tests and treatments for his cancer and the proposed settlement structure would leave him nothing to cover those ongoing costs.

"Bayer wants a release by paying as little as possible without going to trial," he said.

The rough estimate on average gross payouts per plaintiff is about \$165,000, lawyers and plaintiffs involved in the discussions have said. But some plaintiffs could receive far more, and some less, depending upon the details of their case. There are many criteria determining who can participate in the settlement and how much money that person may receive.

To be eligible, the Roundup user has to be a U.S. citizen, have been diagnosed with non-Hodgkin lymphoma (NHL), and had exposures to Roundup for at least one year prior to being diagnosed with NHL.

The settlement agreement with Bayer will be complete when the administrator confirms that more than 93 percent of claimants qualify, according to the terms of the deal.

If the settlement administrator finds a plaintiff ineligible, that plaintiff has 30 days to appeal the decision.

For plaintiffs deemed eligible the settlement administrator will award each case a number of points based on specific criteria. The amount of money each plaintiff will receive is based on the number of points calculated for their individual situation.

Basis points are established using the age of the individual at the time they were diagnosed with NHL and the level of severity of the "injury" as determined by the degree of treatment and outcome. The levels run 1-5. Someone who died from NHL is assigned basis points for a level 5, for instance. More points are given to younger people who suffered multiple rounds of treatment and/or died.

In addition to the basis points, adjustments are allowed that give more points to plaintiffs who had more exposure to Roundup. There are also allowances for more points for specific types of NHL. Plaintiffs diagnosed with a type of NHL called Primary Central Nervous System (CNS) lymphoma receive a 10 percent boost to their points tally, for example.

People can also have points deducted based on certain factors. Here are a few specific examples from the points matrix established for the Roundup litigation:

If a Roundup product user died before January 1, 2009, the total points for the claim brought on their behalf will be reduced by 50 percent.

If a deceased plaintiff had no spouse or minor children at the time of their death there is a deduction of 20 percent. If a plaintiff had any prior blood cancers before using Roundup their points are cut by 30 percent.

If the span of time between a claimant's Roundup exposure and the diagnosis of NHL was less than two years the points are cut 20 percent.

The settlement funds should begin to flow to participants in the spring with final payments hopefully made by summer, according to lawyers involved.

Plaintiffs can also apply to be part of an "extraordinary injury fund," set up for a small group of plaintiffs who suffer from severe NHL-related injuries. A claim may be eligible for the extraordinary injury fund if the individual's death from NHL came after three or more full courses of chemotherapy and other aggressive treatments.

Since buying Monsanto in 2018, Bayer has been struggling to figure out how to put an end to the litigation that includes more than 100,000 plaintiffs in the United States. The company lost all three trials held to date and has lost the early rounds of appeals seeking to overturn the trial losses. Juries in each of the trials found that Monsanto's glyphosate-based herbicides, such as Roundup, do cause cancer and that Monsanto spent decades hiding the risks.

The jury awards totaled well over \$2 billion, though the judgments have been ordered reduced by trial and appellate court judges.

The company's efforts to resolve the litigation have been stymied in part by the challenge of how to head off claims that could be brought in the future by people who develop cancer after using the company's herbicides.

Trial Appeals Continue

Even as Bayer aims to head off future trials with settlement dollars, the company continues to try to overturn the outcomes of the three trials the company lost.

In the first trial loss – the Johnson v. Monsanto case – Bayer lost efforts to overturn the jury finding that Monsanto was liable for Johnson's cancer at the appellate court level, and in October, the California Supreme Court refused to review the case.

Bayer now has 150 days from that decision to ask for the matter to be taken up by the U.S. Supreme Court. The company has not made a final decision regarding that move, according to a Bayer spokesman, but has indicated previously that it does intend to take such action.

If Bayer does petition the U.S. Supreme Court, Johnson's attorneys are expected to file a conditional cross-appeal asking the court to examine the judicial actions that slashed Johnson's jury award from \$289 million to \$20.5 million.

Other Bayer/Monsanto court cases

In addition to the liability Bayer faces from Monsanto's Roundup cancer litigation, the company is struggling with Monsanto liabilities in PCB pollution litigation and in litigation over crop damage caused by Monsanto's dicamba herbicide-based crop system.

A federal judge in Los Angeles last week rejected a proposal by Bayer to pay \$648 million to settle class-action litigation brought by claimants alleging contamination from polychlorinated biphenyls, or PCBs, made by the Monsanto.

Also last week, the trial judge in the case of Bader Farms, Inc. v. Monsanto rejected Bayer's motions for a new trial. The judge cut the punitive damages awarded by the jury, however, from \$250 million to \$60 million, leaving intact compensatory damages of \$15 million, for a total award of \$75 million.

Documents obtained through discovery in the Bader case revealed that Monsanto and chemical giant BASF were aware for years that their plans to introduce a dicamba herbicide-based agricultural seed and chemical system would probably lead to damage on many US farms.

EPA Releases Draft Scope Documents for Risk Evaluations of DIDP and DINP for Public Comment

Bergeson & Campbell Regulatory Developments Blog

https://www.lawbc.com/regulatory-developments/entry/epa-releases-draft-scope-documents-for-risk-evaluations-of-didp-and-dinp-fo

On November 27, 2020, the U.S. Environmental Protection Agency (EPA) announced the availability of the draft scope documents for the manufacturer-requested risk evaluations of diisodecyl phthalate (DIDP) and diisononyl phthalate (DINP). 85 Fed. Reg. 76077; 85 Fed. Reg. 76072. EPA notes in its November 25, 2020, announcement that both DIDP and DINP "belong to a family of chemicals called phthalates and are commonly used as plasticizers in the production of plastic and plastic coating to increase flexibility." EPA seeks public input on the draft scope documents, which include the conditions of use to be included in the risk evaluations, the next step in the process. Comments on the draft scope documents are due January 11, 2021. EPA will use public comments to inform the final scope documents.

EPA states that it generally conducts manufacturer-requested risk evaluations in the same manner as other risk evaluations conducted under the Toxic Substances Control Act (TSCA). The draft scope documents issued include conditions of use, hazards, exposures, and the potentially exposed or susceptible subpopulations that EPA will consider in the risk evaluations. The documents also include a description of the reasonably available information and the best available science approaches that EPA will use; a conceptual model that outlines the potential hazards and exposures throughout the life cycle of the chemical; an analysis plan to identify the approaches and methods EPA will use to assess health and environmental risks; and a plan for peer review. More information on the manufacturer requests for risk evaluations of DIDP and DINP is available in our August 19, 2019, memorandum, "EPA Begins Comment Period on Manufacturer Requests for Risk Evaluation of DIDP and DINP, and Identifies Additional Conditions of Use."

DIDP

According to the draft scope of the risk evaluation for DIDP, EPA plans to evaluate manufacturing (including importing); processing; distribution in commerce; industrial, commercial, and consumer uses; and disposal of DIDP in the risk evaluation. DIDP is manufactured (including imported) in the United States. The chemical is processed as a reactant; incorporated into a formulation, mixture, or reaction product; and incorporated into articles. The draft scope states that the identified processing activities also include the repackaging and recycling of DIDP. According to EPA, DIDP is primarily used as a plasticizer in polyvinyl chloride (PVC) in consumer, commercial, and industrial applications. The industrial and commercial uses identified include automotive, fuel, agriculture, and outdoor use products. Consumer uses such as furnishing, cleaning, and treatment/care products were also identified.

The draft notes that some of these conditions of use were identified in the manufacturer request as circumstances on which EPA was requested to conduct a risk evaluation. EPA identified other conditions of use from information reported to EPA through Chemical Data Reporting (CDR), published literature, and consultation with stakeholders for both uses currently in production and uses for which production may have ceased. EPA presented the proposed additions of these EPA-identified conditions of use and the basis for these proposed additions, along with the manufacturer request, for a 45-day comment period in August 2019.

DINP

According to the draft scope of the risk evaluation for DINP, EPA plans to evaluate manufacturing (including importing); processing; distribution in commerce; industrial, commercial, and consumer uses; and disposal of DINP. DINP is manufactured (including imported) in the United States. EPA states that DINP is processed as a reactant; incorporated into a formulation, mixture, or reaction product; and incorporated into articles. The identified processing activities also include the repackaging and recycling of DINP. DINP is primarily used as a plasticizer in PVC in consumer, commercial,

and industrial applications. EPA identified industrial and commercial uses including automotive, fuel, agriculture, and outdoor use products and construction, paint, electrical, and metal products. Identified consumer uses include furnishing, cleaning, and treatment/care products.

EPA notes that some of these conditions of use were identified in the manufacturer request as circumstances on which EPA was requested to conduct a risk evaluation. EPA identified other conditions of use from information reported to EPA through CDR, published literature, and consultation with stakeholders for both uses currently in production and uses for which production may have ceased. EPA presented the proposed additions of these EPA-identified conditions of use and the basis for these proposed additions, along with the manufacturer request, for a 45-day comment period in August 2019.

Commentary

The draft scoping documents provide a first look into EPA's approach to evaluating these two phthalates. Not surprisingly, there is significant overlap between the properties and conditions of use of the two chemical substances. Although EPA does not specifically refer to legacy uses, EPA appears to be considering releases and exposures due to disposal and recycling of articles that contain DIDP and DINP without specifying whether such articles are already in use or may be sent for waste management in the future.

EPA specifically excludes the use of both DIDP and DINP as components in food packaging from the risk evaluation because chemicals used as food additives (including as indirect food additives, such as a component of packaging) are, by definition in TSCA Section 3(2)(B)(vi), not chemical substances for TSCA purposes. EPA also excludes the use of DIDP as a component of munitions by the exclusion of such components in TSCA Section 3(2)(B)(v).

EPA identified hundreds of data sources in its search of the grey literature (sources other than peer-reviewed journals, including dissertations, conference presentations, white papers, and other such publications). B&C expects that EPA will evaluate these sources in addition to the information provided by the requesting parties and other information from open literature and information known to EPA using its data quality standards. Presumably, all such information will be considered and incorporated in the risk evaluation, as appropriate.

New test finds aerially sprayed pesticide contains PFAS causing significant environmental issues

Ashley Curtin, Nation of Change

https://www.nationofchange.org/2020/12/02/new-test-finds-aerially-sprayed-pesticide-contains-pfas-causing-significant-environmental-issues/

A new study concluded that high levels of per- and polyfluoroalkyl substances compounds used in pesticides aerially sprayed on millions of acres of land across the United States have contaminated the water of thousands of communities. The Public Employees for Environmental Responsibility recently released the results of these "forever chemicals," which don't break down in the environment and build up in the human body.

Per- and polyfluoroalkyl substances (PFAS) are "a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals," which are "very persistent in the environment and in the human body—meaning they don't break down and they can accumulate over time," according to the EPA. With these "forever chemical" building up in the blood stream of the human body, exposure to PFAS can lead to suppressed immune function, thyroid disease, testicular and kidney disease, cancers, and liver damage.

"These findings shock the conscience—states likely have unknowingly contaminated communities' water with PFAS hidden in pesticides," Wenonah Hauter, Executive Director at Food & Water Watch, said. "We need to stop the introduction of toxic forever chemicals into the environment and our water sources to protect public health."

The Public Employees for Environmental Responsibility (PEER) conducted a test on "a jug of Anvil 10+10, the pesticide used in the aerial spraying programs of Massachusetts, parts of Florida, New York, and many other states," and found it contained "roughly 250 parts per trillion (ppt) of PFOA (perfluorooctanoic acid, a C8 PFAS, manufacture of which has

been largely but not completely phased out in the U.S.), and 260 – 500 ppt of HFPO-DA (hexafluoropropylene oxide dimer acid, a "GenX" replacement for PFOA)," according to the report.

According to the test results, Massachusetts aerially sprayed Anvil 10+10 on 2.2 million acres of land across the state in 2019 in an effort to control mosquito-borne illnesses and more than 200,000 acres in 2020.

"In Massachusetts, communities are struggling to remove PFAS from their drinking water supplies, while at the same time, we may be showering them with PFAS from the skies and roads," Kyla Bennett, PEER science policy director, a scientist and attorney formerly with EPA, said. "The frightening thing is that we do not know how many insecticides, herbicides, or even disinfectants contain PFAS."

The test results further confirmed that while PFAS were not listed as an active ingredient in Anvil 10+10, PEER found that the EPA approved PFAS as an inert ingredient and the agency doesn't require pesticide manufacturers to disclose inert ingredients in pesticides, therefore, withholding them as "trade secrets" or "proprietary" information, according to the test results.

"Once again, the EPA has failed to protect the American people from harmful pollution by absurdly designating PFAS as 'inert' and allowing corporations to withhold crucial information about it," Hauter said.

In a letter to the EPA, PEER urges the agency to withdraw PFAS from approval immediately and set stronger enforceable standards to stop the deliberate spraying of such chemicals on millions of acres of land.

"This PFAS fiasco shows that public trust in EPA having a full accounting of these materials and their safety is utterly misplaced," Bennett said. "Until EPA acts, states need to adopt their own safeguards and chemical disclosure requirements because they certainly cannot depend upon the diligence of EPA."

<u>EPA Proposes Expanded FIFRA Exemptions for Certain Plant-Incorporated Protectants (PIPs) Created Using Gene</u> <u>Editing</u>

Karen Ellis Carr, JD Supra (Arent Fox)

https://www.idsupra.com/legalnews/epa-proposes-expanded-fifra-exemptions-43751/

The US Environmental Protection Agency has proposed to amend its pesticide regulations to exempt from FIFRA, the federal pesticide statute, certain pesticidal substances (PIPs) created in plants using biotechnology, so long as the pesticidal substance is found in plants that are sexually-compatible with the recipient plant, i.e., the plant is equivalent to a plant that could have been created using conventional breeding.

Background

EPA regulates pesticides, defined as substances intended for "preventing, destroying, repelling, or mitigating any pest." Consistent with this authority, EPA regulates pesticidal substances introduced intentionally into plants for the purpose of providing protection to the plants. EPA refers to these pesticidal substances as plant-incorporated protectants, or PIPs. Unless exempted, EPA must evaluate PIPs before they are sold and distributed in interstate commerce to ensure that their proposed use would not cause unreasonable adverse effects on humans or the environment.

EPA's regulations at 40 C.F.R. Part 174 outline how it regulates PIPs. The current version of those regulations exempts from regulation under FIFRA PIPs that are moved into a plant through conventional breeding. Residues of conventionally-bred PIPs appearing on food or feed, which would ordinarily be required to obtain either a tolerance (a maximum residue limit) or a tolerance exemption under section 408 of the Federal Food, Drug, and Cosmetic Act, are exempt from those requirements as well. Conventionally-bred PIPs remain subject to FIFRA's adverse effects reporting requirements, under which pesticide registrants must report to EPA regarding additional factual information regarding a pesticide's unreasonable adverse effects on the environment. PIPs created using biotechnology, even if produced using advanced breeding methods that render the plant indistinguishable from a plant produced using conventional breeding, are ineligible for the conventional breeding exemption as currently drafted.

How Would the Proposed Rule Change EPA's Approach?

EPA's proposed rule would expand the PIPs exemption to include PIPs created through biotechnology, including some applications of gene editing, where the pesticidal substance is found in plants that are sexually-compatible with the recipient plant. To be eligible for the exemption, the PIPs must (i) meet certain safety criteria that ensure that the newly-exempt PIPs "pose no greater risk than the currently exempt sexually compatible PIPs," and (ii) be able to have been created through conventional breeding. In addition, (iii) developers of such PIPs must either submit a self-determination letter to EPA, ask EPA to confirm that the PIP meets EPA's exemption criteria, or both. Like conventionally bred PIPs, the newly exempted PIPs would remain subject to FIFRA's existing adverse effects reporting requirements, along with a newly proposed recordkeeping requirement.

Why Did EPA Expand Its Exemption?

FIFRA provides EPA with authority to exempt any pesticide from some or all of FIFRA's requirements if the pesticide is of a character that is unnecessary to be subject to all of the requirements of FIFRA, i.e., pesticides that EPA determines (i) pose a low probability of risk to the environment; and (ii) are not likely to cause unreasonable adverse effects to the environment, even in the absence of EPA regulatory oversight, taking into consideration both the risks and benefits of a product.

What's the Current Status of the Rulemaking?

EPA released a "pre-publication" copy of the proposed rule on August 31, 2020, and the proposed rule was published in the Federal Register on October 9, 2020. EPA is accepting comments on the proposed rule for 30 days, until December 8, 2020. Comments can be submitted to the following docket number on Regulations.gov: EPA-HQ-OPP-2019-0508.

<u>PFAS 'Forever Chemicals' Found in Mosquito Pesticide, Raising Concerns Over Widespread Contamination</u> Beyond Pesticides Blog

https://beyondpesticides.org/dailynewsblog/2020/12/pfas-forever-chemicals-found-in-mosquito-pesticide-raising-concerns-over-widespread-contamination/

(Beyond Pesticides, December 2, 2020) PFAS (per and polyfluorinated alykyl substances) 'forever chemicals' are being detected in a commonly used mosquito pesticide known as Anvil 10+10, according to reporting from the Boston Globe based on independent testing from a watchdog group and state regulators. PFAS are a large family of nearly 5,000 chemicals that may never break down in the environment and have been linked to cancer, liver damage, birth and developmental problems, reduced fertility, and asthma. The chemicals already disproportionately contaminate people of color communities, and there is evidence they reduce the efficacy of vaccines. While many may be familiar with PFAS for its use in nonstick cookware, electrical wire insulation, personal care products, food packaging, textiles, and other consumer goods, its presence within an already toxic pesticide is alarming. Perhaps most concerning, neither the manufacturer nor regulators have a good understanding of how exactly PFAS chemicals made their way into pesticide products.

"This is an issue that cuts to the core of what's wrong with our federal system for regulating pesticides," said Drew Toher, community resource and policy director at Beyond Pesticides. "The finding makes it imperative that EPA review and disclose full pesticide formulations before allowing the public to be exposed to unknown hazards."

Watchdog group Public Employees for Environmental Responsibility (PEER) conducted a preliminary test on Anvil 10+10 this fall, detecting presence of PFAS in a 2.5 gallon jug. "Our tests revealed that Anvil 10+10 contains roughly 250 parts per trillion (ppt) of perfluorooctanoic acid (PFOA), and 260 – 500 ppt of hexafluoropropylene oxide dimer acid (HFPO-DA), a GenX replacement for PFOA," the group wrote in a letter to the US Environmental Protection Agency (EPA) and state regulators. Concerned by the results, the Massachusetts Department of Environmental Protection initiated its own testing directly from 55 gallon drums of the product. Not only was PFAS found, some of the detections exceeded safety limits recently enacted by the state for drinking water. Although EPA does not currently regulate PFAS, it established a 70 ppt Lifetime Health Advisory for PFOA and PFOS in drinking water.

Why would PFAS be found in a pesticide formulation? The chemicals can work well as dispersants, surfactants, antifoaming agents, or other pesticide adjuvants intended to increase the effect of the active ingredient. EPA includes PFAS

chemicals in its "Inert Finder" database, and a PEER press release indicates that many companies have patents on file for pesticide formulations containing PFAS.

Clarke, the manufacturer of Anvil 10+10, denied to the Boston Globe that PFAS was deliberately introduced, but did indicate that contamination could have occurred during production or packaging. Major contamination issues have happened with pesticide formulations in the past. In the 90s and early 2000s, DuPont was subject to a series of lawsuits after its Benlate fungicide was contaminated with the toxic herbicide atrazine. Perhaps most notorious was the Vietnamera rainbow herbicide Agent Orange, which was highly contaminated with another 'forever chemical,' dioxin TCDD (2,3,7,8 tetrachlorodibenzodioxin), a byproduct of the pesticide's manufacturing process. Although the active ingredients in Agent Orange were highly hazardous, it was dioxin that caused horrific birth defects that continue to plague Vietnam today.

Under federal pesticide law, impurities are required to be reported as part of a product's registration if they are "toxicologically significant." It is unclear whether PFAS was tested for contamination, or may have been disclosed to EPA, as product formulation data is considered Confidential Business Information by the agency.

Beyond Pesticides has worked to improve public transparency around pesticide formulations, as it is precisely this sort of secrecy that leads the public to lose confidence in federal regulators. Joined by other environmental and health groups, the organization sued EPA to require disclosure of full pesticide formulations. EPA, after initially indicating it would proceed, reversed course and decided to disclose only 72 inert ingredients it claimed were no longer use in product formulations. Despite assertions that PFAS is not in pesticide formulations, it was not on the agency's list.

EPA's statement to the Boston Globe does little to quell concerns. "There are significant unanswered questions about the data currently available," Dave Deegan, a spokesman for the EPA's offices in New England told the Globe. "EPA will continue to work closely with and support the state on this issue. Aggressively addressing PFAS continues to be an important, active, and ongoing priority for EPA."

However, according to PEER, localities in at least 25 states have used Anvil 10+10 as part of their mosquito spray program.

"In Massachusetts, communities are struggling to remove PFAS from their drinking water supplies, while at the same time, we may be showering them with PFAS from the skies and roads," stated PEER Science Policy Director Kyla Bennett, a scientist and attorney formerly with EPA, who arranged for the testing. "The frightening thing is that we do not know how many insecticides, herbicides, or even disinfectants contain PFAS."

It is likely that these initial tests have only begun to scratch the surface of the sort of contamination that is present in pesticide formulations. To address this issue and achieve publicly accessible, full product testing and disclosure will require strong leadership at the federal level. We can even go further – and work to eliminate the need to register toxic pesticides by promoting organic and ecological pest management practices. But to do so, EPA must stop taking risks with people's health for the benefit of corporate profits. Help tell President-elect Biden we need an Environmentalist to head EPA, with broad environmental credentials and a vision that embraces a dramatic transition away from hazardous chemicals and polluting practices.

All unattributed positions and opinions in this piece are those of Beyond Pesticides.

<u>Environmental Protection Agency Releases Draft Supplemental Risk Evaluation for 1,4-Dioxane, Chemical Byproduct</u> in Consumer Goods

Samuel Boxerman & Joseph Zaleski, Sidley Energy Blog

https://sidleyenergyblog.sidley.com/environmental-protection-agency-releases-draft-supplemental-risk-evaluation-for-14-dioxane-chemical-byproduct-in-consumer-goods/#page=1

After a lengthy public comment review period, the U.S. Environmental Protection Agency (EPA) has released a Draft Supplemental Analysis to the Draft Risk Evaluation for 1,4-Dioxane. EPA's underlying Draft Risk Evaluation for 1,4-Dioxane.

Dioxane was released in June 2019. These documents have been prepared as required by the 2016 Frank R. Lautenberg Chemical Safety Act for the 21st Century Act amendments to federal Toxic Substances Control Act (TSCA). Those amendments direct EPA to conduct risk evaluations of certain chemicals to determine whether the substance presents an unreasonable risk of injury to health or the environment, under the conditions of use, without consideration of costs or other nonrisk factors, while using the best available science and ensuring that decisions are based on the weight of scientific evidence. EPA identified 1,4-dioxane in December 2016 as one of the first 10 chemicals to undergo risk evaluations under the TSCA amendments.

Developed in response to public and peer review comments on the Draft Risk Evaluation, the Draft Supplemental Analysis identifies eight additional conditions of use for 1,4-dioxane present as a byproduct in consumer products that EPA has preliminarily determined do not present an unreasonable risk of injury to health or to the environment: textile dye, antifreeze, surface cleaners, dish soap, dishwater detergent, laundry detergent, paint and floor lacquer, and spray polyurethane foam. If these determinations stand in the final 1,4-dioxane risk evaluation, then any state regulation would be subject to preemption as provided by TSCA section 18. EPA also analyzes exposure to the general population from recreational activities in ambient/surface water (e.g., swimming), determining that this exposure pathway does not present an unreasonable risk of injury to health to the general population from all conditions of use.

The draft supplemental analysis is open for public comment until December 10, 2020.

Some Businesses Using PFAS Compounds Now Subject to TRI Reporting and Likely Greater Scrutiny

Peter J. Fontaine & Marcia Mulkey, Cozen O'Connor

https://www.cozen.com/news-resources/publications/2020/businesses-using-pfas-chemicals-now-subject-to-tri-reporting-and-greater-scrutiny

By this time next year, a wide range of businesses, governments and citizens will know a lot more about per- and poly-fluoroalkyl substances (PFOS and PFOA) in their communities. PFOS and PFOA compounds are a family of emerging contaminants, commonly referred to as PFAS. By July 1, 2021, businesses that in 2020 manufactured, processed, or otherwise used threshold quantities (i.e. 100 pounds or more) of any of 172 listed PFAS compounds must file Toxic Release Inventory (TRI) reports with the U.S. Environmental Protection Agency (EPA). Shortly thereafter, the EPA will begin publishing information on PFAS TRI reporters, a move that likely will lead to greater public scrutiny of businesses that manufacture, process, or use PFAS. The list of the 172 PFAS compounds that now have to be reported is found here. The new PFAS reporting requirement was imposed by the National Defense Reauthorization Act for 2020.

Most of the focus on PFAS to date has been on drinking water contamination, which is the subject of a plethora of state and federal regulatory actions, civil lawsuits, and increasing national investment in sampling and treatment of PFAS in drinking water. Responsibility for PFAS contamination in soil and groundwater is the subject of a wave of litigation. Releases of PFAS to air and the potential for such releases to contribute to localized soil and groundwater contamination is the subject of increasing scrutiny by the EPA, states, and litigants. TRI reports will provide the public with new information about PFAS air releases that could lead to greater scrutiny of PFAS air releases as potential contributors to local soil and groundwater contamination. Click here for the latest on EPA-involved federal actions. To follow developments in states and the private sector, click here.

With the new TRI reporting requirements, businesses that manufacture, process, or otherwise use 100 lbs. or more of any of the listed PFAS compounds should be developing their 2020 data for reporting to the EPA. They also should be planning for a likely surge in local community interest and greater scrutiny by regulators, citizen groups, and potentially responsible parties at PFAS groundwater contamination sites, who are looking to share cleanup liability with other contributing sources of PFAS contamination. The detailed TRI reports to be filed by July 1, 2021, will focus on sources and nature of involvement with each PFAS, as well as details about all releases to the environment, including transmittal in waste to onsite and offsite locations. Those who supply PFAS compounds to such facilities or receive PFAS waste streams from any such facilities also will be identified in the TRI reports and therefore should expect greater scrutiny from regulators and local communities.

WHO MUST REPORT PFAS MANUFACTURED, PROCESSED OR OTHERWISE USED?

TRI reporters include all facilities in many specified NAICS codes who employ more than 10 full-time equivalent employees (FTE) and cover more than 21,000 facilities in such sectors as mining, certain utilities, manufacturing for food and beverages, textiles and apparel, wood, paper, printing, chemicals, metals, electronics, furniture, certain wholesale merchants, publishing, hazardous waste management, and all federal facilities. Complete reports covering the 2020 year are due to the EPA on July 1, 2021 and facility-level preliminary reports are made public by the EPA by the end of July. Complete data sets are published by the EPA in October and analyses of the data are published in January of the following year. Data must be submitted to the appropriate state or Indian Tribe at the same time as supplied to the EPA.

The FTE threshold is for all employees, including administrative staff. A facility is all buildings, structures, and operations on a single site or on contiguous or adjacent sites with common ownership or operations. There is a complex formula for "multiple establishments" with a mix of covered NAICS codes and other enterprises.

The EPA provides detailed annual guidance on reporting and the required forms will cover all activities and uses of each covered PFAS, the maximum amount on-site during the year, the quantity entering each environmental medium on-site, and all transfers of any sort off-site, along with extensive information about waste reduction, recycling, source reduction, and pollution prevention generally. Guidance is available here.

WHAT CHALLENGES FACE REPORTERS IN FILING THE INITIAL YEAR'S PFAS REPORTS?

As we are almost through the first reporting year, TRI reporters should be well underway in developing the information, tracking and measurement, and methodologies for the extensive reporting that is required. Important aspects of report preparation may depend on information about, for example, the timing of highest volume of PFAS. Reporters should, at a minimum, determine whether and which PFAS they manufacture, process, or otherwise use above the thresholds and identify, for covered compounds, what kind of information will need to be developed in order to file complete and accurate reports.

In this first year for PFAS reporting, many manufacturers will face challenges identifying the nature and volume for each of these 172 compounds. Some, like those PFAS widely used in fire suppressant foams, may be relatively easy to identify. Some may be clearly below the 100 lb. threshold applicable to each category (manufacture, process, or otherwise use) and some will be present in less than the de minimis concentration (1.0 percent for most PFAS, .1 percent for PFOA).

All reporters should receive supplier notifications from required manufacturers and importers pursuant to 40 CFR § 372.45 covering the PFAS content and Safety Data Sheet for each supplied PFAS above the de minimis concentration.

The identification of all PFAS involved in manufacturing will include substances produced or imported, and reporting will include information on amounts on-site, amounts involved in sale and production, and information on impurities. Manufacturing activities may be for on-site use, for sale, or as a byproduct of impurity. PFAS "processed" includes formulation, article components, repackaging, recycling, reaction chemistry, and impurities.

"Otherwise used" PFAS compounds include those used as catalysts, in waste processing, as fuel, in construction materials, and as flame suppression or retardants, with narrow exemptions for certain cleaning and vehicle maintenance activities. Many facilities maintain supplies of flame suppressants containing PFAS, for example. While mere storage of flame suppression chemicals without some kind of manipulation would not constitute "otherwise use," it is clear that training and fire suppression use do qualify.

After identifying the nature and source of PFAS at a facility, the TRI reporter must supply details about all releases of the compounds from the facility, including fugitive and nonpoint air releases, stack or point source releases, discharges to waters, transfers to off-site waste disposal, and on-site waste treatment and disposal, including on-site land application and injection wells. Discharges to publicly owned treatment works (POTWs) are specifically covered.

The EPA allows a range of methods to estimate the values required for these reports, ranging from monitoring results, mass-balance calculations, use of published emissions factors, development of site specific emissions factors, and other

justified methods. Information may include additional specifics from suppliers. In many instances, PFAS estimates may be particularly difficult given the limited availability of analytical methods.

While the final reports are not due until July 1, 2021, the entire 2020 year provides the content and basis for the report.

WHAT PUBLIC INFORMATION WILL BE FOUND IN THE REPORTS?

Beginning with the initial EPA publication of preliminary TRI data, all members of the public can access the complete reporting forms for all submitters received by the EPA. These forms are searchable by facility name, zip code, SIC/NAICS code, and chemical name. With the exception of certain information protected as confidential business information, all of the details about quantities, uses and activities, disposal, releases to the environment, and efforts at pollution prevention and reduction are included in the publicly available forms.

WHAT ARE THE IMPLICATIONS FOR TRI REPORTERS, SUPPLIERS, WASTE HANDLERS, AND EXPOSED POPULATIONS? TRI reporters should know long before next July whether they will be reporting PFAS handling and releases and in what quantities and media. Nevertheless, the publication of that information may bring them into contact with a vast range of interested parties with whom they have not been accustomed to engaging. During 2020 and early 2021, reporters should consider engaging suppliers, wastewater treatment facilities, POTWs, and waste disposal operations in discussions about the upcoming content of their reports and about PFAS released to those entities. Some companies may also wish to reduce the amounts of PFAS manufactured, processed, or otherwise used and take steps to respond to any releases documented in their TRI reports.

Among the first and most prominent entities affected by the TRI PFAS publication will be those expressly identified in the reports — the recipients of off-site wastes and perhaps suppliers of PFAS-containing materials. While these kinds of entities may be accustomed to public data on other TRI reported chemicals, the first-time reporting of chemicals that are the subject of much public and regulatory concern could nevertheless be quite dramatic for these entities.

While entities that are facing newly published information about their handling or receipt of possibly multiple sources of PFAS are at the forefront of the potential reactions to the information, they are far from the only entities potentially affected. Communities, potential litigants, land and water users, and residents generally keenly attuned to the disclosure of PFAS contamination. At a minimum, demand for further information and sampling is likely.

In short, the new TRI reporting requirement will lead to a vast increase in public information about PFAS handling and releases that likely will lead to further changes in the regulatory landscape and greater potential liability for facilities reporting PFAS manufacturing, processing, and use, as well as their PFAS suppliers and waste disposal providers.

For more news, visit:

Inside EPA: https://insideepa.com/

• Inside TSCA: https://insideepa.com/inside-tsca-home

Bloomberg Environment and Energy: https://news.bloombergenvironment.com/environment-and-energy/

If you'd like to be removed or would like to add someone to the listserv please contact Bailey Rosen at Rosen.Bailey@epa.gov. Feedback and interesting articles are welcomed. Thanks and enjoy!

And while you're reading.... Remember to shoot your coworkers a shooting star!